

CLAIMS

1. A protease variant comprising an amino acid sequence having a substitution at one or more residue positions equivalent to residue positions selected from the group consisting of 7, 23, 26, 28, 29, 30, 31, 47, 66, 69, 73, 82, 85, 88, 90, 92, 93, 105, 113, 139, 148, 149, 150, 151, 178, 200, 201, 231, 233, 267 and 273 of *Bacillus amyloliquefaciens* subtilisin as set forth in SEQ ID No. 2.

2. The protease variant of claim 1, wherein said variant includes at least one improved property selected from a) wash performance and b) stability as compared to SEQ ID No. 2.

3. The protease variant of claim 1, wherein said variant has improved stability, wherein said stability is improved thermostability.

4. The protease variant of claim 3, wherein said variant comprises a substitution at a position equivalent to 7, 23, 26, 28, 29, 30, 31, 73, 85, 88, 90, 93, 139, 148, 149, 150, 178, 231, 233, 267 and 273.

5. The protease variant of claim 4 wherein said substitution is selected from the group consisting of positions 7N, 23A, 26S, 26T, 28C, 28G, 28S, 28T, 29G, 30A, 31A, 31I, 31T, 31V, 47D, 65M, 66D, 66E, 73G, 73T, 82R, 85D, 85G, 85S, 85L, 85V, 85Y, 88S, 90A, 90I, 90M, 92E, 92R, 93A, 93G, 93S, 93T, 105D, 105E, 105G, 105R, 113D, 139A, 148G, 149A, 149F, 149G, 149H, 149S, 149W, 150A, 150C, 150F, 150L, 151V, 178S, 178C, 178L, 201C, 231G, 231S, 233G, 233V, 267R, 267I, 273S of *Bacillus amyloliquefaciens* subtilisin.

6 The protease variant of claim 1, wherein said variant has improved wash performance at about 20 degrees centigrade, at a concentration of 0.5 to 1.0 ppm protease and at water hardness conditions of about 3 grains per gallon mixed Ca²⁺/Mg²⁺ hardness.

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7. The protease variant of claim 6, wherein said variant comprises a substitution of at least one residue equivalent to 31, 47, 85, 90, 92, 105, 113, 148, 149, 151, 174, 200 and 201 of *Bacillus amyloliquefaciens*.

8. The protease variant of claim 7, wherein said substitution is selected from the group consisting of 31I, 31V, 47S, 47D, 85G, 90V, 92E, 105D, 105E, 113D, 148W, 151V, 174G, 174S, 200S and 201C.

9. The protease variant of claim 1, wherein said variant has improved wash performance at about 40 degrees centigrade, at a protease concentration of 0.3-0.5 ppm protease and at water hardness conditions of about 15 grains per gallon mixed $\text{Ca}^{2+}/\text{Mg}^{2+}$ hardness.

10. The protease variant of claim 9, wherein said variant comprises a substitution at one or more positions equivalent to 31, 69, 82, 148, 201, 203, 231, 233, 258, 267 and 270 of *Bacillus amyloliquefaciens* subtilisin. .

11. The protease variant of claim 10, wherein said substitution at one or more positions comprises at least one substitution at one or more positions equivalent to 31, 69, 82, 148, 201, 231, 233 and 267 of *Bacillus amyloliquefaciens* subtilisin is selected from the group of 31I, 31V, 69G, 82R, 148G, 201S, 231V, 233G and 267R.

12. The protease variant of claim 1, wherein said variant has improved wash performance at about 10 degrees to about 30 degrees centigrade, at a concentration of 1.0 ppm protease and at water hardness conditions of about 6 grains per gallon mixed $\text{Ca}^{2+}/\text{Mg}^{2+}$ hardness.

13. The protease variant of claim 12, wherein said variant comprises a substitution at one or more positions equivalent to 61, 66, 105, 203 and 258 of *Bacillus amyloliquefaciens* subtilisin. .

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14. The protease variant of claim 13, wherein said substitution at one or more positions comprises at least one substitution at one or more positions equivalent to 61, 66, 105, 203, 216 and 258 of *Bacillus amyloliquefaciens* subtilisin is selected from the group of 61E, 66D, 105D, 105E, 203D, 203E, 216E and 258E.

15. A DNA encoding a protease variant of claim 1.

16. An expression vector encoding the DNA of claim 15

17. A host cell transformed with the expression vector of claim 16.

18. A cleaning composition comprising the protease variant of claim 1.